## NOTES AND COMMENTS

# NEW RECORDS OF PALEARCTIC HETEROPTERA IN NEW YORK STATE: MICROPHYSIDAE AND MIRIDAE 

In the course of studying Miridae in New York I have collected two Palearctic Heteroptera species previously unrecorded from this state, Myrmedobia coleoptrata (Fallén) and Stethoconus japonicus Schumacher, as well as Camptozygum aequale (Villers) not known from the lower Hudson Valley and Long Island. A diagnosis, description, and photographs of the adult male of $M$. coleoptrata are given to facilitate recognition of this species.

## Myrmedobia coleoptrata (Fallén) <br> (Microphysidae)

Figs. 1, 2
Loricula pselaphiformis Curtis (Kelton, 1980), Mallochiola gagates (McAtee and Malloch) (McAtee and Malloch, 1924; Slater and Baranowski, 1978), and Myrmedobia exilis Fallén (Kelton, 1981) are the only Microphysidae known to occur north of Mexico. Chiniola quericola Blatchley (Blatchley, 1928), described from a single female collected in Dunedin, Florida and deposited in the collection of the Department of Entomology, Purdue University, is presumably a microphysid; however, it was destroyed in a flood in 1981 (A. Provonsha, pers. comm).

Herein, I report M. coleoptrata (Fallén) new to our fauna. On 10 June 1986, I collected a single male of $M$. coleoptrata by sweeping grasses beneath low hanging branches of Scotch pine, Pinus sylvestris L., at the Nassau County Museum of Fine Art (formerly the Bryce/Frick Estate) near Rt. 25A in Roslyn on the north shore of Long Island, New York. No other specimens could be found by beating the same tree later that season or in 1987. However, subsequent sweeping under the tree on 20 June 1988 yielded two males. To verify my determination of the specimen, I examined material of $M$. coleoptrata, as well as several other related species of Myrmedobia identified by J. Péricart.

In the British Isles M. coleoptrata has been found beneath the bark of various trees, especially spruce, and occasionally in tufts of moss and grass around the bases of the trunks (Southwood and Leston, 1959). The distribution of this species extends from southern Scandinavia south through western Europe (including southern Great Britain) and to the north coast of Africa at Morocco and Tunisia (Péricart, 1972).

Diagnosis. M. coleoptrata is distinguished from the other microphysids known from North America by these features: More elongate habitus (Fig. 1); anterior angle and lateral margin of pronotum not strongly marginate, with collar visible in lateral


Figs. 1, 2. Myrmedobia coleoptrata (Fallén). 1. Dorsal habitus. 2. Lateral view.
view (Fig. 2); labium not reaching beyond procoxae; and antennae with long, erect setae, and segment IV longer than segment II.

Description of adult male. General aspect: Length 1.90 mm ; length from apex of tylus to cuneal fracture 1.39 mm ; elongate and slightly flattened; coloration black, with lateral portion of hemelytra translucently fuscous and membrane slightly darkened; vestiture with moderately distributed suberect to erect, golden-fuscous setae; surface texture with head shining and smooth, pronotum, mesoscutellum, and scutellum shagreened, and hemelytra slightly shining and slightly shagreened. Head: Width across eyes 0.38 mm ; interocular width 0.23 mm ; length from apex of tylus to between ocelli 0.23 mm ; ovoid, short in dorsal view; eyes large and subcontiguous to pronotum; labium robust, just attaining procoxae; antennae with long, suberect, shining setae, length of segment I 0.13 mm ; II 0.30 mm ; III 0.25 mm ; IV 0.33 mm . Pronotum: Posterior width 0.58 mm ; trapeziform; collar slightly wider than width of antennal segment II, reaching lateral margin of pronotum, visible in lateral view; lateral margin not carinate, slightly arched dorsad of coxal cleft; ostiolar peritreme obsolete. Hemelytra: Length to apex of cuneus 1.06 mm ; length of cuneus 0.25 mm ; embolium thickened or beadlike, forming slightly arcuate lateral margin; membrane with one ovoid cell. Genitalia: Not examined.

Stethoconus japonicus Schumacher (Miridae: Deraeocorinae: Hyaliodini)
Henry et al. (1986) first reported the predatory Japanese plant bug, Stethoconus japonicus, in the Western Hemisphere, based on specimens collected at four localities
in Maryland on ornamental azaleas infested with the azalea lace bug, Stephanitis pyrioides (Scott). Their observations indicated that both adults and nymphs prey on the lace bugs, and suggested that $S$. japonicus could prove useful in the biological control of this pest.

Herein, I report the first occurrence of S. japonicus outside of Maryland. On 31 July 1987, I noticed an unusual bug attracted by house lights to the kitchen screen of my residence in South Nyack (Rockland Co.), New York. I identified it as an adult male of $S$. japonicus. Later I surveyed the ornamental plantings of the immediate vicinity for additional specimens. This search (6 August 1987) turned up one female beaten from the base of an azalea in poor condition, apparently severely damaged by the feeding of Stephanitis pyrioides. This record indicates that $S$. japonicus is much more widespread than previously reported.

## Camptozygum aequale (Villers) <br> (Miridae: Mirinae: Mirini)

Wheeler and Henry (1973) first reported Camptozygum aequale in North America from central and western Pennsylvania. They collected this bug from several species of introduced pine in nurseries, ornamental plantings, and Christmas tree plantations. Subsequent to their note, C. aequale was collected in central New York, New Hampshire, and Nova Scotia and Ontario, Canada (Henry and Wheeler, 1979; Wheeler, 1979; Kelton, 1983).

At the same time, locality, and on the same host that I collected the microphysid reported above, I also found 5 male and 5 female C. aequale (on 10 June 1987, I collected 11 teneral males and 6 teneral females on the same tree). A study of the mirine collection at the American Museum of Natural History (AMNH) also revealed a series of 44 male and 83 female C. aequale collected by R. T. Schuh at the Huyck Preserve in Rensselaerville (Albany Co.), New York, 29 June-2 July 1977, from Pinus banksiana.

## DISCUSSION

Previous reports mentioned that the possible method of introduction of these European bugs was via the importation of horticultural materials (Wheeler and Henry, 1973; Kelton, 1980, 1981; Henry et al., 1986). The particular section of the Nassau County Museum of Fine Art from which I collected the specimens of C. aequale and M. coleoptrata may be a rich source of introduced conifer inhabiting Heteroptera. It is part of a "pinetum" initiated in 1919, by Childs and Frances Frick, and contains more than 450 varieties of conifers (Metcalf and Libby, 1986). Likewise, the Huyck Preserve, the former estate of the Huyck family, in addition to containing several hundred acres of mixed second growth forests and old fields, incorporates many introduced ornamental conifers. - Michael D. Schwartz, Department of Entomology, American Museum of Natural History, New York, New York 10024.

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## LITERATURE CITED

Blatchley, W. S. 1928. Two new anthocorids and a new microphysid from Florida (Heteroptera). Entomol. News 39:85-88.
Henry, T. J., J. W. Neal, Jr. and K. M. Gott. 1986. Stethoconus japonicus (Heteroptera: Miridae): a predator of Stephanitis lace bugs newly discovered in the United States, promising in the biocontrol of azalea lace bug (Heteroptera: Tingidae). Proc. Entomol. Soc. Wash. 88:722-730.
Henry, T. J. and A. G. Wheeler, Jr. 1979. Palearctic Miridae in North America: records of newly discovered amd little-known species (Hemiptera: Heteroptera). Proc. Entomol. Soc. Wash. 81:257-268.
Kelton, L. A. 1980. First record of a European bug, Loricula pselaphiformis, in the Nearctic Region (Heteroptera: Microphysidae). Can. Entomol. 112:1085-1087.
Kelton, L. A. 1981. First record of a European bug, Myrmedobia exilis (Heteroptera: Microphysidae), in the Nearctic Region. Can. Entomol. 113:1125-1127.
Kelton, L. A. 1983. European Pseudoloxops coccineus found in Canada, and additional records of Camptozygum aequale in the Nearctic region (Heteroptera: Miridae). Can. Entomol. 115:107-108.
McAtee, W. L. and J. R. Malloch. 1924. Some annectant bugs of the superfamily Cimicoideae (Heteroptera). Bull. Brooklyn Entomol. Soc. 21:69-83.
Metcalf, P. C. and V. Libby. 1986. The House and Garden. Nassau County Museum of Fine Art, Roslyn, New York, 40 pp.
Péricart, M. J. 1972. Hémiptères Anthocoridae, Cimicidae et Microphysidae de l'OuestPaléarctique. Fauna de l'Europe et du bassin méditerranéen, vol. 7. Massin et Cie, Paris, 402 pp.
Slater, J. A. and R. M. Baranowski. 1978. How to Know the True Bugs (Hemiptera-Heteroptera). Wm. C. Brown Co. Publ., Dubuque, Iowa, 256 pp.
Southwood, T. R. E. and D. Leston. 1959. Land and Water Bugs of the British Isles. F. Warne and Co. Ltd., London, 436 pp .
Wheeler, A. G., Jr. 1979. A comparison of the plant-bug fauna of the Ithaca, New York area in 1910-1919 with that of 1978. Iowa St. J. Res. 54:29-35.
Wheeler, A. G., Jr. and T. J. Henry. 1973. Camptozygum aequale (Villers), a pine-feeding mirid new to North America (Heteroptera: Miridae). Proc. Entomol. Soc. Wash. 75:240246.

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